

Claims

- [c1] 1. An apparatus to reposition a temperature indicator stick, the apparatus comprising:
a housing having an outer surface and an inner chamber to receive a temperature indicator stick therein;
an advancement mechanism positioned about the outer surface of the housing and capable of contact with a temperature indicator stick positioned in the chamber of the housing to advance the temperature indicator stick with motion applied to the advancement mechanism.
- [c2] 2. The apparatus of claim 1 further including a resistance mechanism configured to prevent rotation of the temperature indicator stick.
- [c3] 3. The apparatus of claim 1 wherein the advancement mechanism advances the temperature indicator stick one of into the housing and out of the housing.
- [c4] 4. The apparatus of claim 1 wherein rotatable motion applied to the advancement mechanism advances the temperature indicator stick.
- [c5] 5. The apparatus of claim 1 wherein the temperature indicator stick has at least one ridge configured to engage the advancement mechanism.
- [c6] 6. The apparatus of claim 1 wherein the advancement mechanism has one or more threads.
- [c7] 7. The apparatus of claim 6 wherein the housing has a tapered end to align the temperature indicator stick with the one or more threads.
- [c8] 8. The apparatus of claim 1 wherein the advancement mechanism is rotatably fixed to the housing.
- [c9] 9. The apparatus of claim 1 wherein the advancement mechanism is a collet having threads.
- [c10] 10. A temperature indicator stick extension and retraction apparatus comprising:
means for aligning a temperature indicator stick to permit axial movement; and
means for controlling axial movement of the temperature indicator stick to extend and retract the temperature indicator stick.

- [c11] 11. The apparatus of claim 10 further comprising a means for preventing rotational movement of the temperature indicator stick during the axial movement.
- [c12] 12. The apparatus of claim 11 wherein the means for preventing rotational movement is a plurality of flanges configured to engage a ridge of the temperature indicator stick.
- [c13] 13. The apparatus of claim 10 further comprising a means for accumulating residue of the temperature indicator stick upon axial movement of the temperature indicator stick.
- [c14] 14. The apparatus of claim 13 wherein the means for accumulating residue comprises forming the temperature indicator stick in a non-circular shape to have a volume of space in the means for controlling movement of the temperature indicator stick.
- [c15] 15. The apparatus of claim 10 wherein the means for controlling movement of the temperature indicator stick includes a rotatable collet having a threaded portion configured to engage the temperature indicator stick.
- [c16] 16. The apparatus of claim 15 wherein the means for controlling allows extension and retraction of the temperature indicator stick with a single motion.
- [c17] 17. The apparatus of claim 10 wherein the means for aligning a temperature indicator stick includes a housing having an outer surface and an inner chamber to receive a temperature indicator stick therein.
- [c18] 18. An apparatus to extend and retract a temperature indicator stick, the apparatus comprising:
a housing having at least one annular ring at one end and adapted to receive within the housing a temperature indicator stick;
a resistance mechanism secured to the housing to oppose rotational movement of the temperature indicator stick; and
a collet having threads and rotatably coupled to the at least one annular ring of the housing, the collet configured to engage the temperature indicator stick upon rotation of the collet about the housing.
- [c19] 19. The apparatus of claim 18 wherein a pair of annular rings couples the collet to

the housing.

[c20] 20. The apparatus of claim 18 wherein the resistance mechanism includes a series of flanges connected to an interior of the housing.

[c21] 21. The apparatus of claim 18 wherein the temperature indicator stick has at least one ridge configured to engage the threads upon rotation of the collet to cause one of extension and retraction of the temperature indicator stick from the housing.

[c22] 22. The apparatus of claim 21 wherein the housing is contoured at one end to align the threads of the collet with the at least one ridge of the temperature indicator stick.

[c23] 23. The apparatus of claim 18 wherein the temperature indicator stick is ovally shaped.

[c24] 24. An apparatus to reposition a temperature indicator stick, the apparatus comprising:
a housing having an inner chamber directed along a generally longitudinal axis to receive a temperature indicator stick therein; and
a transducer which is mounted to the housing and rotatable about the generally longitudinal axis, the transducer engaging the temperature indicator stick to convert such rotatable motion to linear repositioning of the temperature indicator stick along the generally longitudinal axis.

[c25] 25. A kit to reposition a temperature indicator stick, the kit comprising:
a housing having an inner chamber to receive a first indicator stick, the first indicator stick being shortened in normal use;
an advancement mechanism proximate to the housing and capable of contact with the first temperature indicator stick positioned in the inner chamber of the housing to advance the first temperature indicator stick with motion applied to the advancement mechanism; and
a second indicator stick which may replace the first indicator stick in the inner chamber.

[c26] 26. An apparatus to reposition a temperature indicator stick, the apparatus

comprising:

a housing having an inner chamber to receive a temperature indicator stick therein;

and

means for advancing the temperature indicator stick by a rotating motion about the housing.

09682780 10:00:00